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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/587,621	05/04/2007	Werner Mannschedel	BOET 22.685 (336348-00020)	3572
26304 7590 02/17/2009 KATTEN MUCHIN ROSENMAN LLP 575 MADISON AVENUE NEW YORK, NY 10022-2585			EXAMINER ROSEN, ERIC J	
			ART UNIT 4118	PAPER NUMBER
			MAIL DATE 02/17/2009	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/587,621	MANNSCHEDEL ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	ERIC ROSEN	4118	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 26 July 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 July 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>05/04/2007</u> .  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. This office action is responsive to the amendment filed on 07/26/2006. As directed by the amendment: claims 6, 7, 9, 11, and 14 have been amended. Thus, claims 1-14 are presently pending in this application.

### **Drawings**

2. The drawings have been received on 07/26/2006 and these drawings have been objected to under 37 CFR 1.84 for the following reasons: lines, numbers and letters are not uniformly thick and well defined; and numbers and reference characters are not plain and legible for figure 1. New corrected drawings in compliance with 37 CFR 1.121(d) are required in this application because of the reasons stated above. Applicant is advised to employ the services of a competent patent draftsman outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

### **Specification**

3. The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

#### **Arrangement of the Specification**

4. As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear

in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading.

(a) TITLE OF THE INVENTION.

(b) CROSS-REFERENCE TO RELATED APPLICATIONS.

(c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR  
DEVELOPMENT.

(d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT.

(e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A  
COMPACT DISC.

(f) BACKGROUND OF THE INVENTION.

(1) Field of the Invention.

(2) Description of Related Art including information disclosed under 37  
CFR 1.97 and 1.98.

(g) BRIEF SUMMARY OF THE INVENTION.

(h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE  
DRAWING(S).

(i) DETAILED DESCRIPTION OF THE INVENTION.

(j) CLAIM OR CLAIMS (commencing on a separate sheet).

(k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).

(l) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A

"Sequence Listing" is required on paper if the application discloses a  
nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if

the required "Sequence Listing" is not submitted as an electronic document on compact disc).

5. The disclosure is objected to because of the following informalities: The arrangement of the specification is not in accord with general guidelines.
6. Appropriate correction is required

### **Claim Objections**

7. Claims 2 and 5 are objected to under 37 CFR 1.75(c), for failing to further limit the subject matter of a previous claim. The claim recites the same limitation (adhesion promoter present in a colour layer) present in the independent claim.

### ***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1-10 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kokal, Jr. (US 3959881) and in view of Sano et al (US 20010008164 A1)
10. Regarding claims 1, 2, 3, 4, 5 and 14, Kokal, Jr. discloses an articulating aid for use in dentistry, characterized in that it has, on at least one side of a support layer 12, a plurality of differently coloured colour layers 16 ("the different groups of colors thereof being randomly interspersed in, for example, a single layer as seen in FIG. 2 or in

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numerous layers”; each layer comprises a group of ink granules enclosed in microcapsules; figure 2; Col. 2, lines 51-54;) comprising colouring pigments (Col. 2, lines 48-51). Kokal, Jr. is silent regarding the plurality of differently coloured colour layers comprising at least one adhesion promoter for at least one colouring pigment of the plurality of coloured colour layers, that a layer comprising the adhesion promoter is applied to at least one of the colour layers, and that the colour layers are coloured wax layers. However, Sano teaches an ink composition used in image forming comprising an adhesion promoter (“wax”; paragraph 0120). Therefore, it would be obvious to one of ordinary skill in the art, at the time the invention was made, to modify Kokal, Jr. by including an adhesion promoter in the ink used in Kokal, Jr., as taught by Sano, for the purpose of facilitating transfer of the ink to the paper, so that an adhesion promoter is present in the plurality of coloured layers and a layer comprising the adhesion promoter (one layer of ink) is applied to at least one of the colour layers (a second layer of ink), making the colour layers into coloured wax layers

11. Regarding claim 6, 7, and 8, Kokal, Jr. discloses the claimed invention except for the colour layers have different layer thicknesses and the uppermost colour layer has a defined layer thickness which corresponds to the tolerance height for contact sites of a masticatory unit/occlusal unit, which about 8  $\mu\text{m}$ . However, Kokal, Jr. discloses the ability to change the orientation, size, and shape of the ink granules (Col. 3, line 38 and Col. 4, lines 1-2), subsequently allowing the thickness of any layer to be changed. Furthermore, It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the colour layers have different layer thicknesses

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and the uppermost colour layer have a defined layer thickness which corresponds to the tolerance height for contact sites of a masticatory unit/occlusal unit, which about 8  $\mu\text{m}$ , since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

12. Regarding claim 9, Kokal, Jr. further discloses that the adhesion promoter is encapsulated in microcapsules ("encased by membranes"; Col. 2, lines 54-55; ink previously taught to comprise an adhesion promoter in claim 1).

13. Regarding claim 10, Kokal, Jr. further discloses that the microcapsules are suitable for releasing the adhesion promoter as a result of the action of pressure (Col. 2, lines 54-58).

14. Claims 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kokal, Jr./Sano and further in view of Schlameus et al (US 5254598).

15. Regarding claims 11-13, Kokal, Jr. is silent regarding the microcapsules are suitable for releasing the adhesion promoter as a result of the action of an activator such as heat or UV irradiation. However, Schlameus teaches microcapsules that are activated by heat or UV irradiation in order to release the material within them ("sunlight"; Col. 2, lines 67-68 and Col. 3, lines 1-5). Therefore, it would be obvious to one of ordinary skill in the art, at the time the invention was made, to modify Kokal, Jr. by using the microcapsules taught by Schlameus, for the purpose of providing a more convenient method of releasing the adhesion promoter.

### ***Double Patenting***

16. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

17. Claims 1-5, 9, and 14 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 3-7, and 12 of copending application no. 10587491, filed on 6/25/2008, and in view of Kokal. Although the conflicting claims are not identical, they are not patentably distinct from each other.

18. Regarding claims 1-5, claim 1 of application no. 10587491 discloses an articulating aid characterized in that it has, on one side of a support layer, a colour layer comprising colouring pigment and at least one adhesion promoter for the colouring pigment of the coloured colour layer. Claim 1 of application no. 10587491 is silent regarding a plurality of differently coloured colour layers with an adhesion promoter.



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However, Kokal teaches an articulating aid for use in dentistry, characterized in that it has, on at least one side of a support layer 14, a plurality of differently coloured colour layers 16 (figure 2; Col. 2, lines 51-54) comprising colouring pigments (Col. 2, lines 48-51). Therefore, it would be obvious to one of ordinary skill in the art, at the time the invention was made, to modify application no. 10587491 by having a plurality of differently colored layers with an adhesion promoter, having one layer with an adhesion promoter applied to another colour layer, as taught by Kokal, for the purpose of being able to visualize changes in pressure.

19. Regarding claim 9, claim 3 of application no. 10587491 discloses that the adhesion promoter is encapsulated in microcapsules.

20. Regarding claims 10-13, claims 4-7 of application no. 10587491 disclose the microcapsules being suitable for releasing the adhesion promoter as a result of the action of pressure, or an activator such as heat or UV irradiation.

21. Regarding claim 14, claim 12 of application no. 10587491 discloses that the colour layers are coloured wax layers.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ERIC ROSEN whose telephone number is (571)270-7855. The examiner can normally be reached on Monday-Friday, 9am-5pm EST.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Quang Thanh can be reached on (571)272-4982. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/ERIC ROSEN/  
Examiner, Art Unit 4118

/Quang D. Thanh/  
Supervisory Patent Examiner, Art  
Unit 4118